

**BEFORE THE
PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

**DOCKET NO. 2019-224-E
DOCKET NO. 2019-225-E**

In the Matter of:

South Carolina Energy Freedom Act (House
Bill 3659) Proceeding Related to S.C. Code
Ann. Section 58-37-40 and Integrated
Resource Plans for Duke Energy Carolinas,
LLC and Duke Energy Progress, LLC

**REBUTTAL TESTIMONY OF
JIM HERNDON
ON BEHALF OF DUKE ENERGY
CAROLINAS, LLC AND DUKE
ENERGY PROGRESS, LLC**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Jim Herndon and my business address is 2000 Regency Parkway, Suite 455
3 Cary, North Carolina.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Nexant, Inc. and am a Vice President in the Strategy and Planning
6 Practice within the Utility Services business unit. I am responsible for providing consulting
7 services for Nexant clients in the field of Demand-Side Management (“DSM”) initiatives.
8 In this capacity, I primarily focus on DSM planning, including analysis of DSM market
9 impacts, and assisting utilities in the identification of DSM opportunities and the
10 development and design of DSM program initiatives. This includes the development of
11 market baseline and potential studies, cost-benefit analyses, and design of comprehensive
12 DSM programs and portfolios. A statement of my background and qualifications is
13 attached as Herndon Rebuttal Exhibit 1.

14 **Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN THIS PROCEEDING?**

15 A. No.

16 **Q. ARE YOU INCLUDING ANY EXHIBITS IN SUPPORT OF YOUR REBUTTAL**
17 **TESTIMONY?**

18 A. Yes. I am sponsoring Herndon Rebuttal Exhibit 1, as noted above, and Herndon Rebuttal
19 Exhibit 2, as explained below.

20 **Q. WERE THESE EXHIBITS PREPARED BY YOU OR AT YOUR DIRECTION AND**
21 **UNDER YOUR SUPERVISION?**

22 A. Yes. These exhibits were prepared by me or at my direction and under my supervision.

1 **Q. PLEASE DESCRIBE NEXANT INCLUDING ITS HISTORY,**
2 **ORGANIZATION, AND SERVICES PROVIDED.**

3 A. Nexant, founded in 2000, is a globally recognized software, consulting, and services firm
4 that provides innovative solutions to utilities, energy enterprises, chemical companies, and
5 government entities worldwide. Nexant's Utility Services business unit provides DSM
6 engineering and consulting services to government agencies and utilities, and helps
7 commercial, institutional and industrial facility owners manage energy consumption and
8 reduce costs in their facilities. Nexant also conducts development and implementation
9 services of DSM programs for public and investor-owned utilities, governments, and end-
10 use customers. Our range of experience in the field of energy efficiency includes, but is
11 not limited to:

- 12 • Market Potential Studies;
- 13 • Program design;
- 14 • Program implementation;
- 15 • Marketing;
- 16 • Vendor outreach, education, and training;
- 17 • Incentive processing and fulfillment;
- 18 • Turnkey customer service;
- 19 • Online program tracking and reporting; and
- 20 • Evaluation, measurement and verification ("EM&V").

21 **Q. WHAT SPECIFIC PROJECTS OR STUDIES HAS NEXANT DONE TO ASSESS**
22 **DSM POTENTIAL?**

23 A. Nexant has conducted over 25 market potential studies to identify opportunities for DSM

1 in the United States and Canada. Examples of recent clients include Georgia Power
2 Company, Duke Energy, Florida Power & Light, Santee Cooper, Los Angeles Department
3 of Water and Power, Pennsylvania Public Utilities Commission, the Independent
4 Electricity System Operator of Ontario, Canada, NorthWestern Energy, Platte River Power
5 Authority, Nicor Gas, Cascade Gas, and Sacramento Municipal Utility District.

6 **Q. WHAT WAS THE SCOPE OF WORK FOR WHICH THE COMPANIES**
7 **RETAINED NEXANT?**

8 A. Nexant was hired by Duke Energy Carolinas, LLC (“DEC”) and Duke Energy Progress,
9 LLC (“DEP,” and together with DEC, the “Companies”) to determine the potential energy
10 and demand savings that could be achieved by energy efficiency (“EE”) and demand-side
11 management programs in the DEC and DEP service territories. This work resulted in the
12 Market Potential Study that was relied upon the Companies’ 2020 Integrated Resource
13 Plans (“IRPs”).

14 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS**
15 **PROCEEDING?**

16 A. My rebuttal testimony addresses inconsistencies and incorrect assertions made by
17 Environmental Parties’¹ Witness Jim Grevatt in his direct testimony as they relate to the
18 Market Potential Study conducted by Nexant.

19 **Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

20 A. Nexant’s Market Potential Study provides estimates of future EE and DSM savings
21 potential in the DEC and DEP service territories. Our methods are industry-leading, and

¹ The South Carolina Coastal Conservation League, Southern Alliance for Clean Energy, Upstate Forever, Sierra Club, and Natural Resources Defense Council.

1 our analysis relies on the best data available at the time to support the study, with results
2 specific to the DEC and DEP service territories. Our study includes currently known
3 technologies and estimated costs and impacts for these EE and DSM measures.

4 Mr. Grevatt's claims of omissions in our study seem to misunderstand our goal of
5 providing the Companies with reliable estimates based on current information and
6 reasonable projections of future market trends grounded in quantifiable data sources.
7 Additionally, as discussed below, his critiques of the study design and results appear to
8 incorrectly interpret specific steps in the study's methodology and inputs, as well as ignore
9 the discussions and information shared with the EE/DSM Collaborative stakeholder group,
10 which Mr. Grevatt participated in.

11 **Q. WHAT IS YOUR OVERALL ASSESSMENT OF THE REPORT ATTACHED AS**
12 **EXHIBIT A TO MR. GREVATT'S TESTIMONY, WHICH ADDRESSES THE**
13 **MARKET POTENTIAL STUDY?**

14 A. The report and the associated testimony include suggestions and critiques that appear to
15 misunderstand Nexant's methodology applied in the study, and offer a speculative and
16 incomplete perspective that would not provide the Companies with a technically sound and
17 reliable estimate of future EE and DSM program opportunities. While the Companies
18 sought clarification through discovery of the bases and support for his assertions, there are
19 many questions left unanswered.

20 One example of this is the notion of unnamed "emerging technologies" that Mr.
21 Grevatt suggests the Market Potential Study should have somehow accounted for beyond
22 the comprehensive list of existing technologies included in the study as well as the study's
23 methodology that incorporates market trends throughout the study period. Other examples

1 include unsupported assertions that the Market Potential Study should account for
2 unspecified “technology improvements” without considering changes in baseline codes
3 and standards. A market potential study that takes vague or unsupported positions will
4 ultimately be of little value to an electric utility’s operations and planning. Based upon the
5 pre-filed testimony and exhibits, it does not appear that Mr. Grevatt’s testimony or report
6 are based on the Companies’ actual customer base or service territory.

7 **Q. AS RELATED TO MR. GREVATT’S CRITIQUE THAT THE MARKET**
8 **POTENTIAL STUDY DID NOT ACCOUNT FOR “EMERGING**
9 **TECHNOLOGIES” AND INSTEAD FOCUSED ON “EXISTING TECHNOLOGY**
10 **AND MARKET TRENDS AS OBSERVED WITH CURRENTLY AVAILABLE**
11 **DATA,”² HOW DO YOU RESPOND?**

12 A. Mr. Grevatt appears to draw a contrast between “emerging technologies” and “existing
13 technologies,” which would seem to indicate that the Market Potential Study should have
14 somehow included technologies that do not currently exist. In contrast, Nexant’s Market
15 Potential Study measure list includes technologies and measures that are currently available
16 and known at baseline conditions. One of Nexant’s objectives in developing the Market
17 Potential Study is to avoid introducing bias in its evaluation of the Companies’ market
18 potential within their geographic service territories. As such, Nexant develops measure
19 impacts on the basis of currently available data and information. This includes using
20 observed data from the service territory and data concerning energy efficiency measures
21 that are commercially available at the time of the study.

² Environmental Parties Grevatt Direct, at 5; Grevatt Direct, Exhibit A at 5.

1 Additionally, the concept of changes to baseline and efficient technologies over the
2 25-year study period is, in fact, incorporated in the study methodology in two ways. First,
3 the Companies' baseline sales forecasts include trends in energy consumption over time,
4 determined based on the historic effects of changes to technologies' efficiency. The
5 baseline forecast therefore accounts for future changes in energy consumption, which
6 would likely include the influence of "emerging technologies" to the extent that they have
7 affected historic consumption trends that are projected into future periods. Second, while
8 the study includes a finite set of existing measures with known impacts and costs, Nexant
9 applies measure savings to the baseline sales forecast on a percentage basis, i.e. the efficient
10 technology is applied to the baseline forecast as a percent reduction in consumption.
11 Therefore, the study assumes that, over the 25-year time horizon, the opportunities for
12 efficient technologies relative to the baseline will continue to exist at a similar savings level
13 regardless of changes to baseline efficiencies, which almost certainly will include new
14 technologies.

15 **Q. MR. GREVATT ALSO ASSERTS THAT THE MARKET POTENTIAL STUDY**
16 **FAILED TO INCLUDE A VARIETY OF KNOWN EE MEASURES.³ IS THIS**
17 **ACCURATE?**

18 A. No. The vast majority of purported "omitted measures" are in fact variations of measures
19 that were included in the study or have savings that overlap with study measures. Herndon
20 Rebuttal Exhibit 2 summarizes the measure names used to represent each opportunity in
21 the Market Potential Study, where applicable, or Nexant's assessment of the omitted
22 measure for the Market Potential Study. As demonstrated in Herndon Rebuttal Exhibit 2,

³ Environmental Parties Grevatt Direct, at 4; Grevatt Direct Exhibit A at 6.

1 only one of the measures listed by Mr. Grevatt as omitted is not included in the Market
2 Potential Study with a comparable or overlapping measure. As discussed further in
3 DEC/DEP Witness Bak's rebuttal testimony, based on the Technical Reference Manual
4 relied upon by Mr. Grevatt, the claimed omitted measure of "pool covers" actually applies
5 to gas utilities, not DEC or DEP, with only secondary electric impacts occurring at regional
6 water treatment facilities.

7 **Q. MR. GREVATT ASSERTS THAT THE MARKET POTENTIAL STUDY SHOULD**
8 **ACCOUNT FOR "INCREASING MEASURE SAVINGS DUE TO TECHNOLOGY**
9 **IMPROVEMENT AND DECREASING MEASURE AND PROGRAM COSTS**
10 **DRIVEN BY ECONOMIES OF SCALE."**⁴ **WHY DID THE MARKET**
11 **POTENTIAL STUDY NOT ACCOUNT FOR THESE FACTORS?**

12 **A.** This assertion appears speculative and only applicable in very select situations. While Mr.
13 Grevatt points to LED lighting and heat pumps as examples for which costs have decreased
14 over time, these are singular examples and not indicative of a broader trend. It is also
15 important to note that market adoption of LED lighting has reduced the potential associated
16 with this measure rather than increasing it.

17 From a broader perspective, however, this assertion appears to completely ignore
18 the fact that there are periodic updates to energy efficiency codes and equipment standards.
19 Nexant agrees that new technologies may become available in the future, but such
20 advancements are usually accompanied by code and standard changes that may actually
21 reduce the amount of savings realized by a utility program. An example of this trend is
22 changes to federal efficiency standards for residential central air conditioning. Minimum

⁴ Environmental Parties Grevatt Direct, at 6, 8; Grevatt Direct, Exhibit A at 10.

1 efficiency criteria was updated in 2006 and 2015 and another update is planned for 2023.

2 Mr. Grevatt admits as much when he acknowledges that savings from residential lighting
3 will diminish due to market maturation and the effect of federal standards.⁵

4 **Q. IS MR. GREVATT'S CHARACTERIZATION OF "STATIC MODELING" IN THE**
5 **MARKET POTENTIAL STUDY CORRECT?**

6 A. No. Mr. Grevatt appears to misunderstand, or at a minimum, mischaracterize Nexant's
7 modeling approach. As I described earlier, while Nexant develops measure impacts and
8 incremental costs based on current baselines and efficient technologies, the Market
9 Potential Study applies measure opportunities to the annual baseline sales forecast on a
10 percentage basis. This approach reflects the updates to consumption trends that are
11 incorporated into the baseline forecast, and assumes that efficient technologies that will
12 produce comparable savings to future baseline values, will be available. Additionally, Mr.
13 Grevatt's example of air conditioning with various SEER levels ignores changes to
14 baseline codes and standards.⁶ As noted above, federal standards for residential central
15 air conditioning were updated multiple times in the last 15 years, with another update
16 planned for 2023. Nexant agrees that there may be future changes to costs for higher SEER
17 models, however there will likely also be accompanying changes to efficiency standards,
18 and it would be inaccurate to assume technology improvements without considering codes
19 and standards updates.

⁵ Environmental Parties Grevatt Direct, at 12.

⁶ Environmental Parties Grevatt Direct, at 8; Grevatt Direct, Exhibit A at 10. "SEER" refers to the seasonal energy efficiency ratio.

1 **Q. MR. GREVATT STATES THAT THE RESIDENTIAL SAVINGS ADDRESSED IN**
2 **THE MARKET POTENTIAL STUDY ARE OVERLY RELIANT UPON**
3 **BEHAVIORAL PROGRAMS AND MISSES OPPORTUNITIES FOR MORE**
4 **EFFECTIVE SAVINGS, CITING TO A MARKET POTENTIAL STUDY**
5 **COMPLETED FOR VECTREN ENERGY OF INDIANA. HOW DO YOU**
6 **RESPOND?**

7 A. In contrast to the perspective provided by Mr. Grevatt, Nexant does not introduce bias into
8 the process of ranking and prioritizing measures. Instead, all measures in our study are
9 ranked according to their benefit-cost ratios, as is standard practice in the industry, and
10 applied in this order to the baseline forecast. Therefore, rather than representing an “over-
11 reliance” on a particular type of program, this approach results in an objective, technically-
12 grounded market potential that avoids bias or subjectively choosing preferred measures or
13 programs.

14 While Mr. Grevatt states that “[b]ehavior savings have very short persistence – a
15 measure life of just one year,”⁷ he appears to be conflating the Companies’ use of a one-
16 year measure life for the purpose of cost effectiveness testing to the program’s savings
17 persistence. While the behavioral measures do require annual program expenditures to
18 reinforce the behavioral messaging, with continued program intervention, they show
19 persistent savings over a number of years. In fact, the Companies’ behavioral programs
20 and similar home energy report program would seem to exhibit many of the program
21 enhancements for which Mr. Grevatt advocates. Home energy report programs use an
22 innovative program design that employs random assignment of customers to either a

⁷ Environmental Parties Grevatt Direct, Exhibit A at 15-16.

1 treatment or control group; this design provides an indisputable causal link between
2 savings observed among program participants and the actions of the utility sponsor. The
3 equipment-based measures that Mr. Grevatt appears to prefer can suffer from free-ridership
4 because their designs make it challenging to establish such a causal relationship between
5 implementation of the measure and energy savings.⁸ Furthermore, these programs are
6 expensive for customers and participation is typically limited to a small share of the
7 population. In contrast, behavioral programs are deployed as an “opt-out” design across
8 nearly 1.2 million residential customers in the DEC and DEP territories. Behavioral
9 programs are innovative, comprehensive, effectively free for customers, and they yield
10 reliable savings across all end uses. I find it difficult to understand Mr. Grevatt’s concerns
11 given his testimony describing the desirability of innovative program designs that promote
12 non-lighting savings.

13 Additionally, as discussed in DEC/DEP Witness Bak’s rebuttal testimony, the
14 Environmental Parties participate in the Companies’ EE/DSM Collaborative group and
15 therefore have a constant forum for providing input and feedback on the Companies’
16 EE/DSM program offerings and customer engagement strategies. The Market Potential
17 Study evaluated the known and supportable energy and demand savings actually
18 achievable by DEC and DEP and did not speculate about how unevaluated changes in the
19 Companies’ programs could theoretically impact market potential. In those Collaborative
20 meetings, Nexant invited meeting participants to provide data that could be used to make

⁸ A free rider is a customer who receives an incentive from a utility for installing an energy efficiency measure even though that customer would have installed the measure based on its return on investment without the utility incentive. Consequently, free riders undermine a program’s cost effectiveness because the savings they achieve are not attributable to the utility’s efforts.

1 quantitative assessments of the impacts of non-incentive program change on program
2 participations. None was provided.

3 **Q. MR. GREVATT STATES THAT THE MARKET POTENTIAL STUDY SHOULD**
4 **ACCOUNT FOR PROGRAMS REFERENCED IN THE WINTER PEAK**
5 **ASSESSMENT (“WPA”).⁹ WHAT IS YOUR OPINION ON THIS**
6 **RECOMMENDATION?**

7 A. Development of the Companies’ Market Potential Study began in November 2019 and was
8 completed in June 2020. The WPA was completed in December 2020, well after the
9 completion of the Market Potential Study and filing of the Companies’ IRPs. It therefore
10 would have been impossible to account for the WPA within the Market Potential Study.
11 Future iterations of the Market Potential Study will account for programs and measures
12 that actually develop out of the WPA and which could impact EE- and DSM-related
13 savings.

14 Additionally, while Nexant has not reviewed the WPA in detail, it is our
15 understanding that this study gave equal emphasis to programmatic options and rate design.
16 Changes in rate design—for example, time-of-use rates intended to lower demand during
17 peak times—accounted for more than half of the demand savings in the WPA. The
18 consideration of alternative rate structures would not be appropriately included in the
19 Market Potential Study as these are typically reflected in the load shape in the Companies’
20 load forecast which reflects customers’ price elasticity and changes in consumption
21 patterns of customers.

⁹ Environmental Parties Grevatt Direct, at 14; Grevatt Direct, Exhibit A at 19.

1 **Q. LIKEWISE, MR. GREVATT STATES THAT THE MARKET POTENTIAL**
2 **STUDY SHOULD HAVE USED THE UTILITY COST TEST (“UCT”) RATHER**
3 **THAN THE TOTAL RESOURCE COST (“TRC”) TEST FOR COST-**
4 **EFFECTIVENESS.¹⁰ HOW DO YOU RESPOND?**

5 A. There are several standard tests for cost-effectiveness screening, which provide different
6 perspectives relevant for utility EE and DSM program planning. Nexant’s models are able
7 to calculate and screen for each test and we take no strong position on prominence of any
8 single test, but we do believe it is important to understand the perspective that each test
9 provides. While Mr. Grevatt’s testimony includes critiques of the TRC test, we would also
10 note that the UCT test only provides the perspective of the utility. This may be the most
11 appropriate test perspective for utility program planning and design, but it does not
12 consider customer economics, which is necessary in assessing market potential and rates
13 of technology adoption by customers. Customers may not explicitly consider the TRC test
14 in making decisions, but this test perspective does include the incremental costs that
15 customers would incur to purchase and install an EE technology, while the UCT does not
16 include any insight into customer expenses. Therefore, while the UCT sensitivity resulted
17 in higher economic potential, which by definition is based on 100% market adoption of
18 cost-effective measures, it is not directly transferable to achievable potential, where the
19 customer perspective must be considered.

20 Additionally, the Market Potential Study is a snapshot in time. The study was
21 begun in November 2019 and was completed in June 2020. Use of the UCT for utility
22 program planning was not even proposed by the Companies until June 2020 and was not

¹⁰ Environmental Parties Grevatt, Direct at 4, 6; Grevatt Direct, Exhibit A at 11.

1 approved by the Commission until January 2021 through Order Nos. 2021-32 and 2021-
2 33. As with the WPA, future iterations of the Market Potential Study will review and
3 reconsider the preferred screening perspective for determining market potential.

4 **Q. SIMILARLY, MR. GREVATT STATES THAT THE MARKET POTENTIAL**
5 **STUDY SHOULD HAVE INCLUDED MEASURES NOT INCLUDED IN THE**
6 **COMPANIES' ENERGY EFFICIENCY PORTFOLIO AND SHOULD NOT HAVE**
7 **USED THE COMPANIES' HISTORIC PARTICIPATION RATES.¹¹ HOW DO**
8 **YOU RESPOND?**

9 A. Nexant's Market Potential Study included many measures that are not currently part of
10 DEC's and DEP's EE/DSM portfolios. EE and DSM estimates for these technologies were
11 made under the technical potential scenario. Measures were screened out of the economic
12 potential scenario if they did not pass the TRC screening criterion. Some of these measures
13 are currently part of the Companies' portfolios. Our achievable potential scenario makes
14 program savings estimates on the basis of measures determined to be cost-effective. While
15 the original study approach—as documented in the Work Plan developed at the outset of
16 the study and shared with both the Companies and the Carolinas Collaborative for review
17 and comment—was to include additional cost-effective measures in the Enhanced
18 Achievable Potential scenario, the Companies' programs effectively capture the entire list
19 of cost-effective measures (either through prescriptive measures or in the non-residential
20 'Custom' program).

21 Mr. Grevatt appears to have mischaracterized the use of historic program data as
22 an upper bound for assessing achievable potential, when in fact, this was used as a

¹¹ Environmental Parties Grevatt Direct, at 9; Grevatt Direct, Exhibit A at 11.

1 calibration step in developing the achievable potential. Our opinion is that actual results
2 from historic program offerings in the Companies' service territories are a reliable indicator
3 of expected program performance in the future for comparable programs and spending
4 levels. The Companies have actively managed the EE and DSM program cycle in the
5 Carolinas for ten years, and the Companies have conducted multiple market potential
6 studies and engaged in continuous program planning, management, and evaluation. The
7 study included interviews with the Companies' program staff as well as a review of
8 evaluation reports that have been conducted for the Companies' programs and associated
9 recommendations and best practices, making the historic participation rates a data point to
10 inform future market adoption rather than an "upper bound" as Mr. Grevatt contends.

11 The Enhanced scenario of the Market Potential Study, referenced above, was
12 initially envisioned to include additional measures that are not part of the Companies'
13 current programs. However, because all cost-effective measures were already included in
14 the Companies' programs, the Enhanced scenario was revised during the study to include
15 consideration of additional program investment and the resulting impact on participation
16 rates and savings. In fact, this scenario directly aligned with Mr. Grevatt's statement in his
17 testimony that *"Participation rates can be influenced by a variety of factors, including*
18 *incentives and marketing, which can be adjusted to drive different participation rates*
19 *through program designs and strategies."*¹² Higher incentive rates for the measures
20 included in the study was used as the proxy mechanism to reflect additional program
21 spending, resulting in increased participation rates.

¹² Environmental Parties Grevatt Direct, at 9.

1 **Q. MR. GREVATT ASSERTS THAT THE MARKET POTENTIAL STUDY MADE**
2 **UNREASONABLE ASSUMPTIONS REGARDING COMMERCIAL AND**
3 **RESIDENTIAL END USES THAT RESULT IN AN UNDERESTIMATION OF**
4 **SAVINGS.¹³ HOW DO YOU RESPOND TO THAT ASSERTION?**

5 A. As described in the Market Potential Study report, and acknowledged in Mr. Grevatt's
6 testimony,¹⁴ the study primarily relied on DEC's and DEP's end-use consumption data,
7 with secondary data from EIA to supplement and further disaggregate the forecast data.
8 To maximize applicability and relevance to a particular utility, Nexant's preference is to
9 primarily align study parameters with utility-specific data, particularly when the study
10 findings are inputs for future resource planning. Mr. Grevatt's assertion to more closely
11 align with EIA survey information would lessen the correlation of the study inputs and
12 findings to the Companies' customer characteristics and consumption patterns, as the EIA
13 survey information is applicable to the entire South Atlantic region rather than data specific
14 to DEC and DEP. The South Atlantic regional data in the EIA report encompasses eight
15 states from the Mason-Dixon line all the way to the Florida Keys, which includes five
16 different climatic zones.

17 As an example, the estimate of "commercial miscellaneous" in the Market Potential
18 Study differs from those in the EIA survey due to the use of data specific to the Companies,
19 including commercial customer average end-use intensity, share of non-consumption by
20 commercial segments, and a calibration of the Companies' end-use intensity by segment.

21 **Q. DO YOU HAVE ANY FINAL RESPONSE TO MR. GREVATT'S TESTIMONY?**

22 A. Yes. I believe that—in order to ensure sound planning and an accurate understanding of a

¹³ Environmental Parties Grevatt Direct, at 6.

¹⁴ Environmental Parties Grevatt Direct, at 7.

1 utility's actual potential for energy efficiency and demand-side management savings—a
2 market potential study must be technically grounded; utilize valid, quantifiable inputs; and
3 be based on the utility's actual customer base and service territory. The moment a market
4 potential study begins to rely upon speculation or unsupported assertions, the study loses
5 its value as a planning tool. Nexant conducted the Companies' Market Potential Study
6 with these characteristics and Mr. Grevatt's recommendations are not supported by valid
7 technical data that would improve the quality or accuracy of the study.

8 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

9 **A.** Yes.